Pine County WATERS

Minnesota's Impaired Waters

List Updated

The Minnesota Pollution Control Agency (MCPA) has prepared an update of the federally required list of lakes and stream segments in Minnesota that are considered polluted and need further study to determine how they can be restored to a healthy condition. The 2006 draft update adds 396 new polluted waters to the existing list. The listed waters, also known as "impaired waters" under the federal Clean Water Act, do not meet water-quality standards. They contain various pollutants above acceptable limits designed to protect public uses of those waters. A small fraction of Minnesota's lakes and streams have been assessed so far for impairments (14 percent of lakes and eight percent of streams). About two-thirds of the polluted waters on the current list are there due to mercury contamination.

The proposed 2006 Impaired Waters list, methodology for listing, and regional maps may be accessed on the MPCA's Web site at www.pca.state.mn.us/water/tmdl/index.html#tmdl. Questions and requests for printed copies of the list may be directed to Howard Markus at 651-296-7295 or 1-800-657-3864.

Which impaired waters affect Pine County?

By Mary Kay Anderson, District Manager

The Grindstone, Kettle, and St. Croix Rivers continue to be on the impaired waters list. The Grindstone River's aquatic recreation is affected. The pollutant is fecal coliform.

Also listed again were two tributaries to the Snake River – Pokegama Creek and Mission Creek. The Kettle River's affected use is aquatic consumption and the pollutant is mercury. The St. Croix's affected use is aquatic life and consumption and the pollutants are mercury and PCBs. PCBs found in the St. Croix River are new to the list this year. Seven Pine County lakes were also listed again for mercury. Those lakes include Tamarack, Sturgeon, Upper Pine, Big Pine, Long, Bass, and Little Bass.

Mercury can come from many sources. Some sources of mercury are natural, while others are human-made such as fluorescent lights, mercury thermometers and thermostats. Mercury in the atmosphere can fall to the ground when it rains or snows.

PCBs are a mixture of chemicals which are no longer produced in the United States, but are still found in the environment. Dumping chemicals such as lawn fertilizers, pesticides, oil, or gas in storm drains or near rivers or lakes can cause other forms of pollution. Burning garbage, especially plastics, is also hazardous to our environment.

Soil Survey Update

We have added two new Soil Scientists to the Survey crew here in Pine County. Their arrival was quicker then we first planned so I would like to thank Pine County Coordinator John Stieben and the other county personnel that assisted in getting us more temporary room. Shannon Johnson started here on Oct 17th and Jessica Weis started on the 31st; I look forward to working with both of them. A little introduction by them is given.

Jessica Weis

My name is Jessica Weis. I grew up on a hobby farm in Marshfield, WI. I graduated from the University of WI-River Falls in December 2004 with a B.S. degree in Broad Area Agriculture with emphasis in Animal Science and Conservation. Upon graduation, I started working for NRCS as a soil scientist in Ironwood, MI. I'm very excited to be here and look forward to meeting and talking with many of you.

Shannon Johnson

My name is Shannon Johnson and I am a 2005 graduate of the University of Wisconsin- Stevens Point, where I received a B.S. in Soil and Land Management. I was President ("Soil Goddess") of our school SWCS chapter and of Women in Natural Resources, and was very active in soil judging, receiving 8th place individually at the national NACTA competition in April. Summer of 2004 I spent progressive soil surveying as an intern with the NRCS outside Fairbanks, Alaska. This summer my great adventure was the birth of my daughter, McKenna- my first. We look forward to many new adventures with the NRCS.

Update

From Soil Survey Project Leader Jerry Gorton

The soil survey is progressing on schedule with legend development and updating of known soil map unit interpretations that will be needed. This is one of many first steps needed in preparing for the start of soil mapping. Another will be preparing the aerial photographs normally used in soil mapping this winter. They have been ordered but have been held up due to Hurricane Katrina.

Some other great news is that NRCS has purchased new Light Detection And Ranging Imagery (LIDAR) for Pine County. This laser surface mapping and merging technology will give us a detailed shape of the land surface. When LIDAR is overlaid with aerial photography the projection models are in natural colors and 3D. This 3D viewing capability we then will have and use in soil mapping will increase mapping quality and it will speed up the overall mapping process.

We are planning to have a First Acre Ceremony in early May and will let you know where and when as soon as we work that out. See you then!

Our newsletter is now available electronically!!

If you would like to receive your issue of the "Pine County Waters" via email, contact Mary Kay Anderson with your email address. Please indicate if you still want to receive the hard copy version also, or at least until you feel comfortable receiving the newsletter electronically and then we'll remove your name from our postal mailing database. You can send your request to marykay.anderson@mn.nacdnet.net

Loving Your Lake Too Much?

By Mike Mueller,
Hydrologist, DNR Waters

When you mow, stop short of the water's edge and leave a strip of longer grass.

A few years ago I saw a DNR brochure with this title: " Are you loving your lake to death?" It was directed at those of us who insist on eliminating the native trees and plants that evolved over thousands of years, and replacing them with a bunch of exotic grasses that are more commonly referred to as 'your lawn'. I confess I used to belong to the very large group of folks that simply did not know that there are alternatives to having a lawn. This is not surprising if you think about the hundreds of lawn, fertilizer and mower commercials we are exposed to every year. In the end though, my dislike of mowing and my love of nature led me to create "mother nature's better homes and gardens" at my house. Minimal lawn, maximum forested area and lots of perennial flowers.

So what can you do to prevent your property from being part of the problem and get it to be part of the solution? You can start by creating as much permeable area on your property as possible. Permeable means that it is vegetated but not covered with a hard surface. Rain and water can soak into the soil in permeable areas. Trees, shrubs, gardens and lawns are permeable areas. Rooftops, sidewalks, driveways and patios are examples of impervious material. Impermeable areas increase runoff from rain and snowmelt, which leads to greater pollution carried to the water.

Buffer areas trap and hold runoff water. If you're trying to minimize the runoff from your property, it makes a lot of sense to create a buffer between your house and the lake or between the house and the street. That way the water has to go through the vegetation in your buffer area first. Lawns have only a limited capacity to filter and trap nutrients from runoff, so it would be better to have an area of larger, more robust, vegetation for your buffer. A relatively new concept in buffers is the use of a rain garden. These are nothing more than a shallow depression planted with native flowers or grasses. They store rain from modest sized storms and allow it to percolate into the soil. Heavy rains will fill up the rain garden, then overflow through a designed outlet. By using native plants, they have the appearance of a perennial flower garden. They are also a valuable source of habitat to butterflies and other wildlife. And, of course, they look nice. You don't even have to mow them.

Grass clippings, leaves and other "organic" materials, like pet droppings, are other sources of pollution. All of these things contain Phosphorus, which is public enemy Number One for your lake. When you mow, stop short of the water's edge and leave a strip of longer grass. If your street has gutters and storm sewers, keep your clippings off the street. Urban stormwater almost always ends up in a water body somewhere. If you have a steep slope that is difficult to mow, plant it to something that doesn't need mowing. If you bag your lawn clippings, dispose of them away from the lake. Buy or make yourself a compost bin and turn clippings and leaves back into rich garden soil. Pick up after your pets and dispose of the waste where it can't run downhill to the water.

Soil erosion is also a big concern. If you have a landscaping or other outdoor construction projects, plan ahead to cover exposed soils with mulch or erosion control fabrics at the end of each day's work. If you are going to have bare soil on a slope, consider buying a roll of wood fiber blanket to cover the hill. It's relatively cheap to buy, about $50 for a 90 by 8-foot roll, and will protect whatever seed you are planting in the area. You put down your plant seed and roll the fiber blanket on top. You can also add potted plants by cutting a small hole in the material.

They withstand heavy rainfall and will decompose within a couple of years, leaving a nicely vegetated slope.

Septic system maintenance is a must for lake properties! Soil treatment systems will only work properly if they are maintained. This means you must pump your tank every two or three years. You'll see ads from time to time touting "additives" for your septic tank. Experts agree that they are not needed in septic systems, so save your money. However, you should use chemicals judiciously, as some soaps and detergents will affect the beneficial bacteria in the tank. Avoid soil compacting activities (atv's, vehicles) on your drainfield or mound and prevent trees from growing on the drainfield as well. Freezing is a concern for your system during winters of low snowfall, so try letting the lawn grow extra high in the fall or cover it with straw. I planted wildflowers on my drainfield, which not only add color all summer, but provide insulating warmth all winter as well!

Although the building code calls for water saving appliances and fixtures in new homes, older homes generate more water into the system. Try and minimize the amount of water you use. Do not use a garbage disposal on a septic system. Compost foods scraps (not meat or fish) rather than flushing down the sink. Unused household or hazardous chemicals should be taken to a waste disposal facility, rather than dumping them down the drain. Never dump antifreeze or oils in a street drain! Try and minimize putting solvents, cleansers and abrasives in your system.

Last, along the waterfront, try to protect valuable lake plants that filter nutrients from the water. Place your dock in an area where it avoids bulrushes and other emergent plants. If you don't swim in the lake, do you really need to add sand to your beach? What about other lake weeds, do you really need to clear a large area or could you get by with a narrow strip by your dock?

I have touched upon a variety of ways that homeowners can help their lakes. If it seems a bit overwhelming, try and pick one thing that seems like it would fit in your lifestyle and put it into practice. Once that is working, then tackle something else. Eventually these practices become a part of a daily routine and you will wonder why you ever did it differently. If you need more information, there are many excellent resources available to you on the Internet. Most natural resource type agencies or local governments also have publications, manuals and brochures that will help you on your way. Lake associations are another good source for help. Who knows, maybe some day we can change the title of that brochure to "Are you loving your lake to life?"

Pine County WATERS

Pine County appoints 3 to planning commission

Pine County appoints three new County Planning Commission members

The Pine County Planning Commission consists of seven members all appointed by the County Board of Commissioners. Three new members have recently been appointed to four-year terms including Richard Glattly, rural Willow River; John Bassett, Hinckley; and Vicky Elliot, Cloverton. Alana Petersen, rural Pine City, has been reappointed, also for a four-year term. The remaining Planning Commission members are Richard Stepan, Jane Carlson and Patrick Schifferdecker.

The Pine County Planning Commission has specific responsibilities established in state statutes and by county ordinances. Primarily, the Planning Commission advises the County Board on growth and development issues (such as residential subdivision review), recommends an annual work program identifying issues which should be taken up as public discussions and is also responsible to implement land management ordinances all of which have a direct impact on the County's water resources. As growth and land development continue to challenge all local governments in the county, a brief overview of these ordinances is provided to acquaint both old and new county residents:

Pine County Shoreland Management Ordinance manages land use, buildings, grading and filling and sewer construction within 300 feet of rivers and streams and 1000 feet of lakes, and within the Kettle River Wild and Scenic River Corridor.

Pine County Floodplain Management Ordinance regulates development in the floodplains of Pokegama Lake, Cross Lake and the Snake River. Building permits are required and flood elevations may be necessary on these waters before permits can be issued. The purpose of the ordinance is to elevate new construction to minimize flood damages, therefore minimizing disaster relief expenditures.

Pine County Subdivision and Platting Ordinance: All single land splits under 40 acres and multi-lot residential subdivisions require approval by the County. Proper legal descriptions, road frontage, adequate road construction designs, stormwater management, acceptable locations for septic systems and consistency with township minimum lot sizes, are the primary review factors.

Pine County Sewer Code: The intent of the sewer code is to ensure that new on-site sewer systems are constructed according to a basic code and operate effectively to avoid ground and surface water pollution. Many townships and most cities in the county continue to implement a sewer code.

In addition to these specific ordinances, an **Adult Use Ordinance** has recently been adopted.

The County maintains **24 Recycling Sheds** at ten different locations across the county. In 2005, approximately 1200 tons of paper, cans, bottles and plastic were recycled by county residents.

The County maintains a **Solid Waste Management Ordinance** however, as with all ordinances, revisions and clarifications are necessary as attitudes change regarding how much stuff is reasonable. Issues to be addressed include better management of junk and salvage yards to avoid surface and groundwater pollution, setbacks from sensitive land uses and management of hazardous wastes that result from salvage. The County Attorney's Office is working with the Planning Commission to update this ordinance.

In recent years, the Planning Commission has recommended that the County **Comprehensive Plan** should be formally updated. The current County Plan was adopted in 1993. The purpose of a comprehensive plan is to establish the legal support for land use ordinances and establish the big picture goals for how growth and development can be managed to maintain environmental quality, provide for efficient public services and coordinate permitting programs among the county, townships, cities and sewer districts.

Issues typically addressed in a Comprehensive Plan include the coordination and effectiveness of land use management programs among all local governments; how to maintain environmental and ground and surface water quality; how to encourage growth zones around the county's cities and plan for orderly extension of water and sewer systems to serve the county's increasing population; how to accommodate rural residential growth on less than ideal soils for sewer systems while preserving the rural character that is so appealing to most Pine County residents; and, how to maintain a positive economic development program and accommodate large, potentially conflicting land uses.

As Pine County changes from a rural, agricultural county to one of more shoreland development, hobby farms and suburban residential pattern, challenging questions have and will continue to be posed to all local governments. There is no other government or agency responsible to manage these issues, but remains the responsibility of the citizens, townships, cities, sewer districts and County.

Questions, comments and recommendations can be directed to the Pine County Board, County Planning Commission or the Planning, Zoning and Solid Waste Department, 1610 Hwy 23 N. Sandstone, MN 55072.

Tree Handbooks or Backyard Woods packet

The Pine SWCD office has the newly revised Minnesota SWCD Tree Handbooks available for sale. They cost only $1 and include lots of valuable information including site preparation, planting, water and nutrient needs, weed control, animal depredation, tree disease, insect and pest management, pruning and thinning, and much, much more.

New to our office is a packet called Backyard Woods. The packet is available for $1. The Backyard Woods Guide is an informative 44-page full-color guide with useful facts as well as family activities related to 12 topics. The packet also contains separate tip sheets for each of those 12 topics which are listed below:

- Making a master plan
- Work safely with a chain saw
- Protect your property from wildfire
- Identify and manage hazardous defects in your trees
- Keep your woods healthy
- Attract wildlife
- Protect clean water
- Help your preferred trees grow
- Prune your trees
- Plant trees
- Grow and collect special forest products
- Generate wood products

If you are interested in ordering either or both of these items, please send a check to Pine SWCD, 260 Morris Ave No, Hinckley MN 55037. Shipping charges are an added $1 for the Tree Handbook and an added $4 for the Backyard Woods packet. Shipping would still be $4 if you want both books.

Tree Handbook
$1 + $1 shipping = $2
Backyard Woods packet
$1 + $4 shipping = $5
Tree Handbook + Backyard Woods packet $2 + $4 shipping = $6

2006 TREE ORDER FORM

PINE COUNTY SOIL & WATER CONSERVATION DISTRICT
260 MORRIS AVE NORTH, HINCKLEY, MN 55037
Phone: (320) 384-7431 Web Site: www.pineswcd.org

Name: _____ Phone: _____

Address: _____ Email: _____

City/State/Zip: _____ Alt. Phone _____

*** Trees must be picked up in Pine County at designated time and location. ***
Trees come in bundles of 25. Trees must be ordered in full bundles.

*** ALL BUNDLES ARE $22.00 EACH (Price includes sales tax). ***

		Scientific Name	Bare Root Size	# Bndls	Total Cost
Shrubs	Cranberry, Amer Highbush	*Viburnum trilobum*	12-18"		
	Dogwood, Redosier	*Cornus Sericea*	18-24"		
	False Indigo NEW!	*Amorpha fruticosa*	18-24"		
	Hazelnut, American NEW!	*Corylus americana*	12-18"		
	Lilac, Common	*Syringa vulgaris*	18-24"		
	Nanking Cherry	*Prunus Tomentosa*	18-24"		
	Rose, Rugosa	*Rosa rugosa*	12-18"		
	Sumac, Staghorn NEW!	*Rhus typhina*	12-18"		
Small Tress	American Plum	*Prunus americana*	⚡ 18-24"		
	Chokecherry, Common	*Prunus Virginiana*	18-24"		
	Flame Willow	*Salix flame*	18-24"		
	Flowering Crab, Red Splendor	*Malus 'Red Splendor'*	⚡ 12-18"		
	Mountain Ash	*Sorbus aucuparia*	⚡ 18-24"		
	Nannyberry NEW!	*Viburnum lentago*	12-18"		
Large Trees	Black Walnut	*Juglans nigra*	⚡ 18-24"		
	Butternut	*Juglans cinera*	⚡ 12-18"		
	Green Ash	*Fraxinus pennsylvanica*	⚡ 18-24"		
	White Ash NEW!	*Fraxinus americana*	⚡ 18-24"		
	Hackberry NEW!	*Celtis occidentalis*	⚡ 18-24"		
	Norway Hybrid Poplar	*Populus deltoides x Populus nigra*	⚡ 18-24"		
	Paper Birch	*Betula papyrifera*	⚡ 18-24"		
	Red Maple	*Acer rubrum*	⚡ 18-24"		
	Sugar Maple	*Acer saccharum*	⚡ 18-24"		
	Bur Oak NEW!	*Quercus macrocarpa*	⚡ 18-24"		
	Red Oak	*Quercus rubra*	⚡ 18-24"		
Conifers	White Cedar	*American arborvitae*	⚡ 8-15"		
	Eastern Red Cedar, Juniper	*Juniperus virginiana*	⚡ 8-14"		
	Black Spruce (transplant)	*Picea mariana*	⚡ 8"+	OUT	OUT
	Norway Spruce	*Picea abies*	⚡ 15-24"		
	White Spruce (transplant)	*Picea glauca*	⚡ 8"+		
	Balsam Fir NEW!	*Abies balsamae*	⚡ 8"+		
	Tamarack NEW SIZE!	*Larix americana*	⚡ 12"+		
	Red (Norway) Pine (trnsplnt)	*Pinus resinosa*	⚡ 8"+		
	White Pine (transplant)	*Pinus strobus*	⚡ 8"+		

		Price	Qty	Cost
Specialty Items	Tree Mats - (3'x3' squares - includes staples) *Sold Individually*	$1.50 each		
	Fertilizer Packs (drop in planting hole)	$0.25 each		
	Native Flower/Grass Seed Mixture * ← *For details, check with*	$25.00		
	Butterfly Garden Mixture ** NEW! ← *Pine SWCD*	$25.00		
	Plantskydd - 1 Qt. Spray Bottle	$20.00		
	Plantskydd - 1.32 Gallon Refill Jug	$50.00		

** 1oz./3oz. mix covers 100-250 sq. ft. Variety of soils [not wet]. Full to part sun. Flowers 2-4' high, grasses 2-6' high.*
*** 2 oz.mix covers 75 - 150 sq. ft. Variety of soils [not wet]. Full to part sun. Flowers 2 - 4' high.*

Order early to ensure availability!! Deadline for ordering is April 25th - or until inventory is depleted.
All orders under $50 must be paid in full when ordering. 50% down is required on orders over $50.

Make checks payable to: Pine SWCD

ORDER TOTAL _____

PAYMENT AMOUNT ENCLOSED _____

BALANCE REMAINING _____

Pine SWCD cannot replace trees that do not survive. The District reserves the right to change prices or substitute stock if needed.

⚡ These trees are not compatible with overhead electric distribution lines. Plant them AT LEAST 25 feet beyond the lines to allow for crown development and future line reconstruction.

For more info contact East Central Energy at (866) 293-9068, or visit www.eastcentralenergy.com

East Central Energy
Great service – guaranteed

Seed Mix Fact Sheet

Wildflower/ Grass Seed Mix

1 oz./ 3 oz. mix respectively, covers 100 – 250 square feet. Suits a variety of soils; dry to moist, not wet. Full to part sun. Flowers 2 – 4′ high, grasses 2 – 6′ high. This mixture should have no less than half a day of sun.

Flower contents: Purple coneflower, Hoary vervain, False sunflower, White & Purple clover, Yellow coneflower, Anise hyssop, Wild bergamot, Lance-leaf coreopsis, Black-eyed Susan, and others.

Grass contents: Indian grass, Big blue stem, Little blue stem, and Side oats gramma.

Butterfly Mix

2 oz. covers 75 – 150 square feet. Suits a variety of soils; dry to moist, not wet. Full to part sun. Flowers 2 – 4′ high. This mixture should have no less than half a day of sun.

Flower contents: Butterflyweed, Marsh milkweed, New England aster, Blue giant hyssop, Turtlehead, Purple coneflower, Boneset, Blazingstar, Rattlesnake master, Common ox-eye, Wild bergamot, Mountain mint, Black-eyed Susan, Cup plant, Blue vervain, Hoary vervain, Lance-leaf coreopsis.